

Abstract

A method and an apparatus of discharging polymer from a continuously operated gas phase reactor, wherein at least one monomer is polymerized in a bed containing active catalyst
5 formed by catalyst and polymer particles suspended in a fluid, the bed defining a fluidized
bed level in said reactor. The invention comprises continuously withdrawing polymer
powder from the reactor; and adjusting the discharge rate of the polymer powder so as to
maintain a constant bed level during polymerization. By means of the invention the
discharge of the polymer can be made truly continuous without any disturbance of the
10 polymerization. The rate of withdrawn polymer can be flexibly adjusted depending on the
progress of the polymerization and it can also easily be scaled up if the capacity of the
reactor is increased.